

WHAT IS CLAIMED IS:

1. A method of controlling an HVAC system comprising:
 - automatically measuring physical parameters associated with said HVAC system, said physical parameters including an approximate temperature of air being supplied to a controlled space;
 - remotely analyzing said physical parameters;
 - developing operating parameter instructions in response to at least one result of said analyzing said physical parameters; and
 - transmitting said instructions to a controller of said HVAC system via an I/O connection; and
 - cycling at least a portion of said HVAC system in accordance with said instructions at a rate that is determined by said physical parameters for improving efficiency of said HVAC system.
2. A method of cooling a controlled space, comprising:
 - receiving a call for cooling from said controlled space;
 - initiating operation of an air conditioning unit;
 - calculating a target temperature;
 - monitoring a temperature of said controlled space;
 - turning off at least a portion of said air conditioning unit while said call for cooling remains pending in response to said temperature of said controlled space reaching said target temperature; and
 - periodically transmitting a set of data characteristic of operational parameters of said air conditioning unit to a remote monitoring and control system.
3. A method of heating a controlled space comprising:
 - receiving a call for heating from said controlled space;
 - initiating operation of a furnace;
 - calculating a target temperature;
 - monitoring a temperature of said controlled space;
 - turning off at least a portion of said furnace while said call for heating remains pending in response to said temperature of said controlled space reaching said target temperature; and

periodically transmitting a set of data characteristic of operational parameters of said air conditioning unit to a remote monitoring and control system.

4. An HVAC control apparatus comprising:

input circuitry configured to receive input signals from external sensors;

processing circuitry coupled to said input circuitry and configured to evaluate said signals;

output circuitry coupled to said processing circuitry, wherein said processing circuitry generates output signals for an HVAC system, said output signals affecting operation of said HVAC system;

a timer;

a memory, wherein said memory stores information indicative of an on time for at least one energy consuming component of said HVAC system; and

a communications connection coupled to said processing circuitry for communication of data regarding HVAC system status to system administrators and for receiving operational instructions from said administrators.